

RB36
University System of Maryland Office – Capital
University System of Maryland

Capital Budget Summary

State-owned *Capital Improvement Program*
(\$ in Millions)

Projects	Prior Auth.	2021 Request	2022 Est.	2023 Est.	2024 Est.	2025 Est.	Beyond CIP
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University System of Maryland at Southern Maryland – Third Academic Building	\$18.964	\$62.202	\$4.829	\$0.000	\$0.000	\$0.000	\$0.000
Total	\$18.964	\$62.202	\$4.829	\$0.000	\$0.000	\$0.000	\$0.000

Fund Source	Prior Auth.	2021 Request	2022 Est.	2023 Est.	2024 Est.	2025 Est.	Beyond CIP
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GO Bonds	\$12.964	\$62.202	\$4.829	\$0.000	\$0.000	\$0.000	\$0.000
Revenue Bonds	5.000	0.000	0.000	0.000	0.000	0.000	0.000
Nonbudgeted Funds	1.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	\$18.964	\$62.202	\$4.829	\$0.000	\$0.000	\$0.000	\$0.000

CIP: *Capital Improvement Program*

GO: general obligation

Capital Facilities Renewal Capital Improvement Program
(\$ in Millions)

Program	2019 Approp.	2020 Approp.	2021 Request	2022 Est.	2023 Est.	2024 Est.	2025 Est.
Capital Facilities Renewal	\$17.000	\$28.646	\$28.385	\$48.949	\$50.000	\$50.000	\$50.000
Total	\$17.000	\$28.646	\$28.385	\$48.494	\$50.000	\$50.000	\$50.000

Fund Source	2019 Approp.	2020 Approp.	2021 Request	2022 Est.	2023 Est.	2024 Est.	2025 Est.
Revenue Bonds	\$17.000	\$18.646	\$12.000	\$23.494	\$25.000	\$25.000	\$25.000
GO Bond	0.000	10.000	0.000	0.000	0.000	0.000	0.000
Nonbudgeted Plant Funds	0.000	0.000	16.385	25.000	25.000	25.000	25.000
Total	\$17.000	\$28.646	\$28.385	\$48.494	\$50.000	\$50.000	\$50.000

GO: general obligation

Summary of Recommended Bond Actions

1. University System of Maryland Office
Approve \$62,202,000 in general obligation bonds.
2. Capital Facilities Renewal
Approve \$12.0 million in Academic Revenue Bonds for various capital facility renewal projects.
3. SECTION 13 – University System of Maryland Office – University of Maryland at Southern Maryland Third Academic Building
Approve preauthorization of \$3,229,000.

Summary of Issues

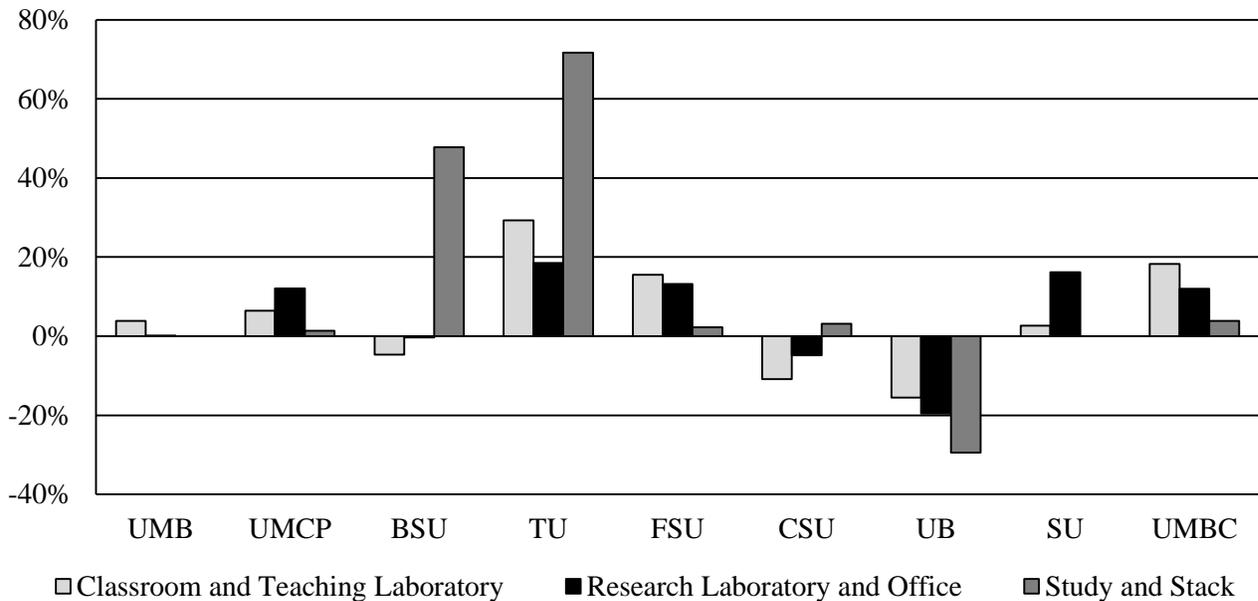
The University System of Maryland Office (USMO) has implemented a significant change in how the Capital Facilities Renewal Program is funded beginning in fiscal 2021. USMO intends to supplement Academic Revenue Bond (ARB) funding with plant funds, instead of general obligation

(GO) bond funding, for future facility renewal projects. From fiscal 2021 through 2025, the total amount planned to be spent from plant funds reaches \$116.4 million.

Performance Measures and Outputs

Institutions annually submit the Space Inventory and Guidelines Application (SGAP) report to the Maryland Higher Education Commission that includes data on an institution’s current academic space inventory and the 10-year projected inventory. Projected inventory reflects anticipated changes in space due to construction of new facilities, renovations, demolitions, and changes in leased space. **Exhibit 1** shows the 10-year (fall 2018 and projected fiscal 2028) percentage change in academic space inventory by institution. Overall, most institutions project an increase in their inventory.

Exhibit 1
10-year Percentage Change in Academic Space
Fall 2018 and Projected Fiscal 2028



BSU: Bowie State University
 CSU: Coppin State University
 FSU: Frostburg State University
 SU: Salisbury University
 TU: Towson University

UB: University of Baltimore
 UMB: University of Maryland, Baltimore Campus
 UMBC: University of Maryland Baltimore County
 UMCP: University of Maryland, College Park Campus

Note: The University of Maryland Eastern Shore did not submit an updated Space Inventory and Guidelines Application report in 2018.

Source: Maryland Higher Education Commission

The University of Baltimore anticipates an overall decline in inventory primarily related to not renewing lease space. Study and stack space increase 47.8% and 71.7% at Bowie State University and Towson University (TU), respectively, reflecting planned renovations and new facilities between fall 2018 and fiscal 2028. An aggregate increase in academic space will help alleviate or even eliminate academic space deficiencies at some institutions calculated on projected enrollment and the type of research conducted at an institution. More detail on an institution's academic space surpluses or deficiencies is provided in the institution's capital analysis.

Facilities Renewal and Backlog

Prior to fiscal 2019, the University System of Maryland (USM) used a ratio of renovation to replacement value to assess the relative size of its deferred maintenance backlog. However, under this method, some institutions combined renovation and deferred maintenance and others did not, resulting in some institutions overstating their estimated backlog. In order to get a more accurate estimate of systemwide deferred maintenance, USM now surveys institutions annually, requesting each institution to categorize deferred maintenance costs into three categories:

- building-related structural and envelop repairs that are deferred or reaching the end of their useful life (*e.g.*, windows, doors, roofs, masonry, and curtain wall systems);
- building-related mechanical and electrical system upgrades and/or replacements that are currently deferred or needed in the short term (within the next 5 to 10 years); and
- needed building-related life safety and regulatory improvements (*e.g.*, Americans with Disabilities Act) that can be separated from other categories.

As shown in **Exhibit 2**, the backlog of deferred maintenance totals \$2.2 billion. The University of Maryland, Baltimore Campus and the University of Maryland, College Park Campus (UMCP) account for 61.1% of the total inventory of space systemwide.

Exhibit 2
Estimated Deferred Maintenance Backlog for State-supported Facilities
Fiscal 2019
(\$ in Thousands)

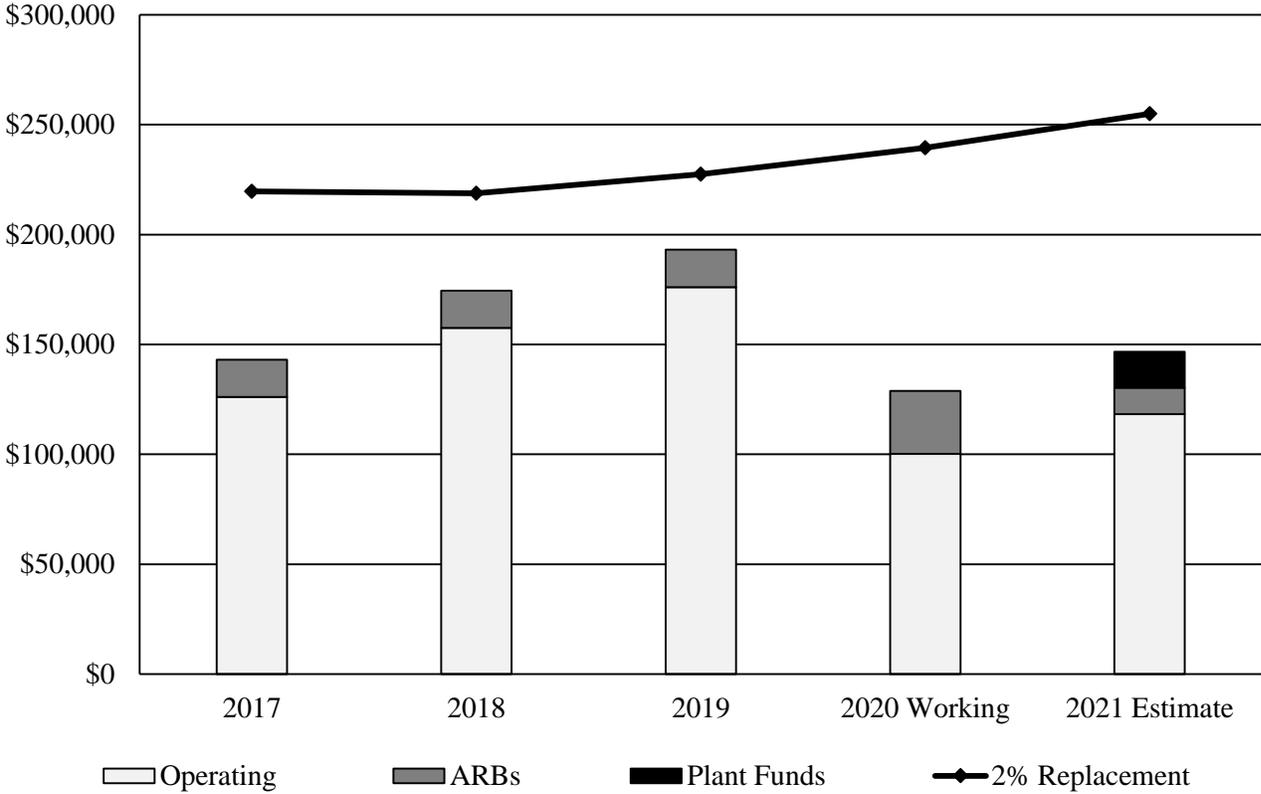
<u>Institution</u>	<u>Total Backlog</u>	<u>% of Total</u>
University of Maryland, Baltimore Campus	\$579,088	26.63%
University of Maryland, College Park Campus	748,996	34.44%
Bowie State University	76,195	3.50%
Towson University	171,919	7.91%
University of Maryland Eastern Shore	81,324	3.74%
Frostburg State University	24,975	1.15%
Coppin State University	68,336	3.14%
University of Baltimore	70,194	3.23%
Salisbury University	107,642	4.95%
University of Maryland Baltimore County	214,750	9.87%
University of Maryland Center for Environmental Science	22,794	1.05%
University System of Maryland Regional Centers	8,603	0.40%
Total	\$2,174,816	

Source: University System of Maryland

Spending on Facilities Renewal

As shown in **Exhibit 3**, from fiscal 2017 to 2019, total spending on facilities renewal grew by 34.9%, or \$50.0 million, reflecting a steady increase in operating expenditures. However, while spending reached its highest level of \$193.1 million in fiscal 2019, this was \$34.3 million below the 2% target. The upward trend reflects the priority that the Board of Regents (BOR) and the Chancellor place on renewal. Presidents are held accountable for meeting the BOR target annually, increasing operating expenditures until the 2% target (operating expenditures equal 2% of the replacement value of State facilities) is reached. BOR adopted a strategy for institutions to meet the target by increasing operating expenditures on renewal by 0.2%. However, despite this strategy, spending in the fiscal 2020 working budget decreases by 33.3%, or \$64.2 million, to \$128.9 million. While estimated fiscal 2021 spending goes up slightly, it is still well below fiscal 2019 actuals, and the gap between the 2% target and spending widens. **The Chancellor should comment on the widening gap between spending on facilities renewal and the overall 2% replacement target and why operating funds put toward facilities renewal decreased so significantly between the fiscal 2019 and 2020 budgets.**

Exhibit 3
Operating and Capital Spending on Facility Renewal
Fiscal 2017-2021 Estimate
(\$ in Thousands)

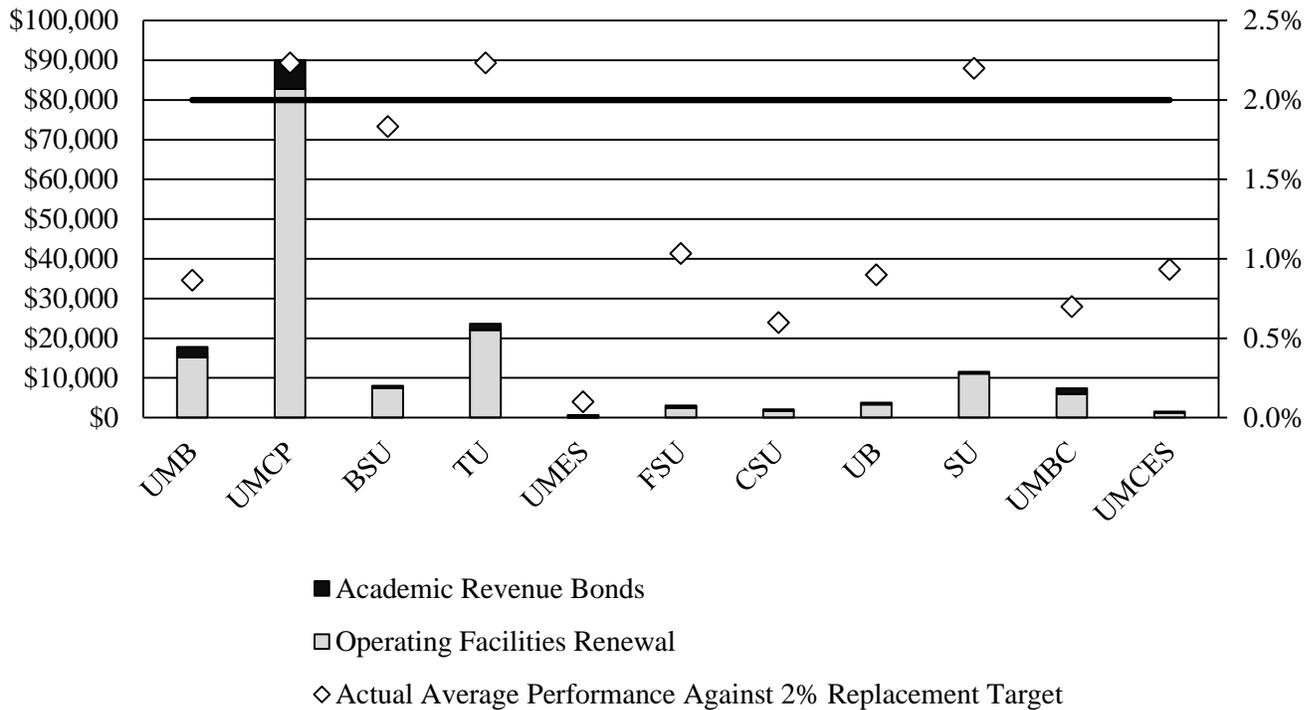


ARB: Academic Revenue Bond

Source: University System of Maryland

Exhibit 4 shows the actual allocation of the fiscal 2017 through 2019 of operating expenditures and ARBs for facilities renewal and the 2% target. In order for USM to meet the 2% target, institutions would need to have spent a total of \$659.8 million (the 2% target is based on the most recently available replacement value numbers from the SGAP report). From fiscal 2017 through 2019, USM institutions fell \$150.1 million short of the 2% target. Over this period, three institutions successfully met the 2% target, UMCP, Salisbury University, and TU. **The Chancellor should comment on how institutions are held accountable for failing to reach the 2% replacement target.**

Exhibit 4
Average Annual Operating and Capital Facility Renewal Expenditures
Fiscal 2017-2019 Actuals
(\$ in Thousands)



BSU: Bowie State University
 CSU: Coppin State University
 FSU: Frostburg State University
 SU: Salisbury University
 TU: Towson University
 UB: University of Baltimore

UMB: University of Maryland, Baltimore Campus
 UMBC: University of Maryland Baltimore County
 UMCES: University of Maryland Center for Environmental Science
 UMCP: University of Maryland, College Park Campus
 UMES: University of Maryland Eastern Shore

Note: The University of Maryland Global Campus does not have a spending target due to the unique nature of its facilities profile, which includes leased buildings and buildings that are off campus or outside of the State.

Source: University System of Maryland

Plant Funds

Institutions can transfer operating funds to the plant fund, which is a group of accounts similar to a savings account that institutions can set aside funds for anticipated capital expenditures. Funds are used to finance the acquisition, construction, renovation, and maintenance of facilities. Plant funds may only be used for facilities and capital activities and may not be easily transferred to other accounts for noncapital purposes. For State-supported facilities, the use of plant funds is governed by the capital

budget process in accordance with State law and BOR policies. BOR oversees the use of self-supported plant funds.

Specifically, funds are set aside for:

- facilities renewal and deferred maintenance needs of State-supported facilities;
- debt service payments and retirement of debt;
- periodic or major facilities renewal of self-supported or auxiliary facilities;
- nonbudgeted fund requirements in the *Capital Improvement Program* (CIP); and
- facilities or land acquisitions.

Through its efforts to protect its credit rating, USM has been fiscally conservative in building up its available funds, which include plant funds and fund balance. The growth in these funds has allowed USM to fund capital projects that otherwise may not have had the funding to proceed. In addition, if an institution receives donor funding to support the construction of a facility, it may have to temporarily borrow funds, also known as a bridge loan, from its account until it receives the donor funds. As shown in **Exhibit 5**, from fiscal 2012 to 2019, plant funds grew 65.6%, or \$480.5 million, of which \$461.5 million was related to State-supported funds. In fiscal 2019, plant funds totaled \$1.2 billion of which \$827.0 million was State-supported. This is addressed further in Issue 1 of this analysis.

Exhibit 5
Ending Plant Fund Balances
Fiscal 2012-2019
(S in Thousands)

<u>Fiscal Year</u>	<u>State Supported</u>	<u>Non-State Supported</u>	<u>Total</u>	<u>Annual Change</u>	
2012	\$365,530	\$366,566	\$732,096	\$110,065	17.7%
2013	300,290	473,398	773,688	41,592	5.7%
2014	312,753	454,801	767,554	-6,134	-0.8%
2015	346,686	456,894	803,580	36,026	4.7%
2016	380,863	534,805	915,668	112,088	13.9%
2017	385,412	580,331	965,743	50,075	5.5%
2018	691,065	387,557	1,078,621	112,878	11.7%
2019	827,020	385,595	1,212,616	133,994	12.4%

Source: University System of Maryland

Exhibit 6 shows changes in transfers to and expenditures from the plant fund for fiscal 2019. A total of \$770.1 million was transferred into plant funds of which \$632.8 million were State-supported funds. Over half of these funds, \$324.5 million, are designated for future renewal, replacement, and deferred maintenance projects. Institutions spent \$649.2 million in plant funds of which \$315.7 million were State-supported funds used for renewal, replacement, and deferred maintenance projects.

Exhibit 6
Changes in Plant Fund
Fiscal 2019
(\$ in Thousands)

	<u>State-supported</u>	<u>Non-State Supported</u>	<u>Total</u>
Beginning Balance	\$720,155	\$358,466	\$1,078,621
Transfers In			
Plant Fund ¹	18,809	12,273	
Current Projects	35,537	26,105	
Land Acquisition	3,466	0	
CIP Nonbudgeted Funds	-5,500	0	
Renewal and Replacement	293,377	20,630	
Deferred Maintenance	31,160	3,519	
Future Projects	72,837	56,941	
Future Debt Service	178,882	3,572	
Internal Loans	4,183	14,377	
Balance Service Center	12,986	0	
Total-Transfers In	\$645,737	\$137,415	\$783,153
Expenditures			
Plant Fund	-\$5,104	\$8,326	
Various Projects	42,172	25,456	
Land Acquisition	1,973	0	
CIP Nonbudgeted Funds	3,977	0	
Renewal and Replacement	286,352	42,443	
Deferred Maintenance	29,357	5,033	
Future Projects	24,507	19,203	
Future Debt Service	145,128	0	
Internal Loans ³	2,505	8,812	
Balance Service Center	8,007	1,013,714	
Total-Expenditures	\$538,873	\$110,286	\$649,158
Ending Balance	\$827,020	\$385,595	\$1,212,616

CIP: *Capital Improvement Program*

¹ Funds are not designated for a specific purpose.

² Some institutions classified a transfer of funds into plant funds as expenditures.

³ Includes the University System of Maryland Office revolving equipment loan.

Source: University System of Maryland

Budget Overview

University System of Maryland at Southern Maryland

The University System of Maryland at Southern Maryland (USMSM), previously known as the Southern Maryland Higher Education Center, formally became USM’s third regional higher education center on March 1, 2019. The project will provide a third academic facility at USMSM to support new education, research, and professional training programs. The total cost of the project is \$86.0 million, which is unchanged from the previous CIP.

Authorization Uses (\$ in Millions)

Description	Prior Authorization	2021 Request	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate
Planning	\$7.769	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Construction	11.195	62.202	3.229	0.000	0.000	0.000
Equipment	0.000	0.000	1.600	0.000	0.000	0.000
Total	\$18.964	\$62.202	\$4.829	\$0.000	\$0.000	\$0.000

Authorization Sources (\$ in Millions)

Description	Prior Authorization	2021 Request	2022 Estimate	2023 Estimate	2024 Estimate	2025 Estimate
GO Bonds	\$12.964	\$62.202	\$4.829	\$0.000	\$0.000	\$0.000
Revenue Bonds	5.000	0.000	0.000	0.000	0.000	0.000
Nonbudgeted Funds	1.000	0.000	0.000	0.000	0.000	0.000
Total	\$18.964	\$62.202	\$4.829	\$0.000	\$0.000	\$0.000

The project will address the following facility problems:

- Classroom Space Need:** In fiscal 2018, USMSM had 213 full-time equivalent students (FTES). Enrollment is projected to grow to 717 FTES by fiscal 2023. The existing classroom facilities in buildings I and II currently have 395 student stations. Based on the projected enrollment of 717 FTES in fiscal 2023, a total of approximately 800 student stations will be needed in the future. This translates into a need for 16 additional classrooms. Additionally, existing classrooms are not adequately sized, with only 3 of the 31 classrooms in the two existing

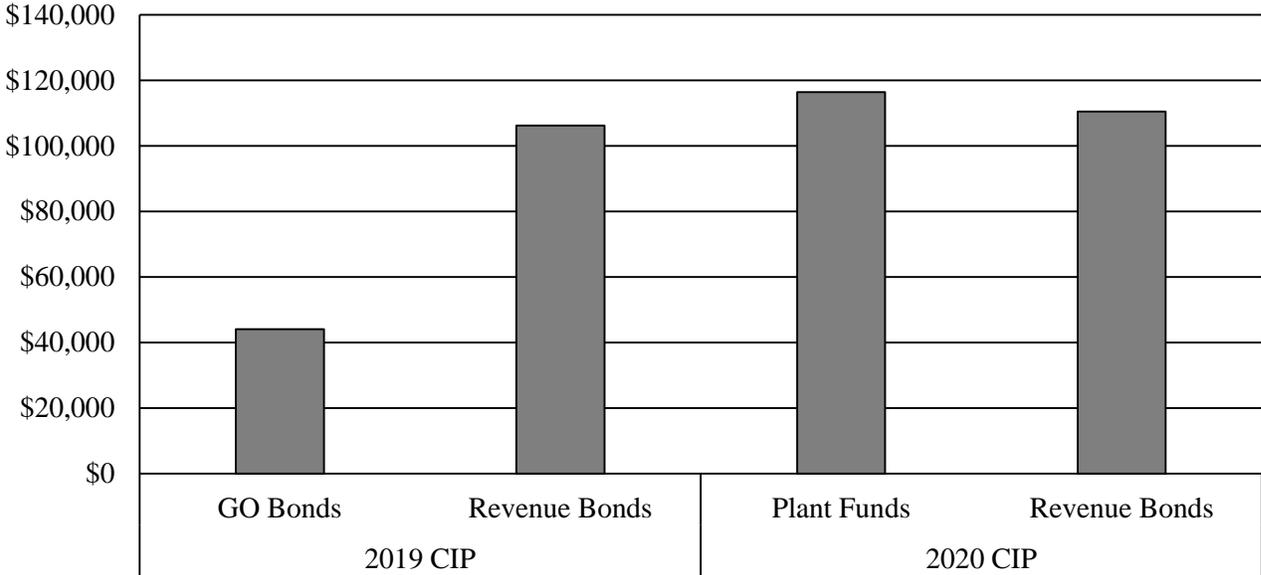
academic buildings at USMSM being able to hold a maximum of 32 students; institutions that offer courses at USMSM are now requiring classrooms that can accommodate up to 36 students.

- ***Class Laboratory Space Need:*** In fiscal 2018, USMSM had 54 FTES in engineering and technical fields. By fiscal 2033, FTE enrollment is projected to be 230. Based on the projected enrollment, a total of 8,172 net assignable square feet (NASF) of class laboratory space will be needed, while there is currently only 3,120 NASF.
- ***Need for Specialized Electrical Engineering Space:*** In order to assist with the expansion of the Unmanned Autonomous System (UAS) industry in Southern Maryland, UMCP began offering an electrical engineering program in fall 2016. Neither of the two existing buildings at USMSM has space specifically designed for an electrical engineering program.
- ***Lack of Research Space:*** None of the two existing buildings at USMSM have research space to support the UMCP electrical engineering program.
- ***Economic and Workforce Development in Southern Maryland:*** By 2025, the Association of Unmanned Vehicle Systems International has projected that UAS integration could have an economic impact of \$2 billion and create 2,500 jobs. Southern Maryland is likely to benefit from the projected growth in UASs because of the federal and State institutions located in the region.
- ***Need for Additional Conference Space:*** USMSM offers training programs and conferences to military personnel and the larger community. Between fiscal 2011 and 2016, USMSM held 1,527 training programs that served approximately 102,300 people. Meeting spaces in the two existing buildings are heavily utilized during the year, resulting in events being turned away because of lack of space. The proposed project includes a 330-seat auditorium to address USMSM’s training requirements. Based on the Department of Budget and Management’s input, St. Mary’s County has committed to funding the auditorium.

Capital Facilities Renewal

The annual facilities renewal program provides funding for infrastructure improvements at various facilities at USM institutions. Funding for fiscal 2021 totals \$28.4 million, which includes \$12.0 million in ARBs and \$16.4 million in USM plant funds. The 2020 CIP reflects a significant change in how the Governor intends to fund the USM Capital Facilities Renewal Program. As shown in **Exhibit 7**, while the 2019 CIP programmed \$150.2 million comprised of \$44.0 million in GO bonds and \$106.2 million of ARB revenue bond proceeds, the 2020 CIP programs \$226.9 million comprised of \$116.4 million of USM plant funds and \$110.5 million of ARB funds.

Exhibit 7
USM Facility Renewal Program Funding Plan
2019 CIP Compared to 2020 CIP
(\$ in Thousands)



CIP: *Capital Improvement Program*
 GO: general obligation
 USM: University System of Maryland

Source: University System of Maryland

Fiscal 2021 funding will enable USM to undertake 33 specified projects at 11 institutions with \$6.4 million to be allocated by USMO for emergency and systemwide projects. Additional information regarding how this program will be funded in future years is discussed in Issue 1 of this analysis.

Issues

1. Use of Plant Funds to Fund Facility Renewal Projects

As previously discussed, the 2020 CIP programmed a total of \$125.0 million from USM’s plant funds from fiscal 2021 to 2025 of which \$116.4 million is to be allocated toward various facility renewal projects at USM institutions and \$8.6 million to upgrade the Maryland Fire and Rescue Institute Western Regional Training center. The source of these funds would be from USMO’s future debt service account. The account consists of funds that USMO collects from the institutions to cover their portion of the ARB debt service. According to USMO, the amount charged to institutions is based on a financial model that includes projected future interest rates, which has been 5%. However, since at least the recession, interest rates on its debt have been approximately 3%. USMO keeps the revenue generated between what is charged to the institutions and the actual debt service payment in a “stabilization” account so as to have a cushion in times of higher interest rates. It should be noted that USMO starts charging institutions July 1, even though ARB debt may not be issued for months. Furthermore, general funds are provided to the institutions to cover their ARB debt service. As of the close of fiscal 2019, USMO State-supported future debt service account totaled \$270.0 million.

The use of \$25 million annually from plant funds for at least the next five years raises concerns of the financial viability of the plan, particularly whether USM has enough funds to support the multi-year plan and the potential impact on USM’s credit rating. **The Chancellor should comment on the amount of funds available in its debt service account to fund future facility renewal projects.**

Operating Budget Impact Statement

Executive’s Operating Budget Impact Statement – State-owned Projects Fiscal 2021-2025 (\$ in Millions)

	2021	2022	2023	2024	2025
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USMSM – Third Academic Building						
	Estimated Operating Cost	\$0.000	\$1.367	\$1.636	\$1.667	\$1.699
	Estimated Staffing	0.000	2.00	3.00	3.00	3.00

USMSM – Third Academic Building will have operating budget impacts beginning in fiscal 2022. A majority of that funding will be the result of equipment and utility expenses to bring the building on line. Staffing is also expected to increase by 2 full-time equivalent (FTE) personnel in fiscal 2022, increasing to 3 in 2023 and all subsequent years, as calculated by the ratio of 1 FTE per 40,000 gross square feet (GSF). When completed, the Third Academic Building’s total GSF will reach 84,316.

Preauthorizations

Exhibit 8 provides details on the preauthorization for USMO.

Exhibit 8 Preauthorizations Fiscal 2022-2025 (\$ in Millions)

<u>Project</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Reason</u>
USMSM – Third Academic Building	\$3.229	\$0.000	\$0.000	\$0.000	Finish construction.

USMSM: University System of Maryland at Southern Maryland

Source: Department of Budget and Management

GO Bond Recommended Actions

1. Approve the \$62,202,000 in general obligation bonds to continue construction of the University System of Maryland at Southern Maryland – Third Academic Building.
2. Approve \$12.0 million in Academic Revenue Bonds for various capital facility renewal projects.
3. Approve the preauthorization of \$3,229,000 in general obligation bonds to finish construction of the University System of Maryland at Southern Maryland – Third Academic Building.